DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-008733 Address: 333 Burma Road **Date Inspected:** 18-Aug-2009

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 645 **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Xu Xian Ping No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:**

OBG & TOWER Components **Bridge No:** 34-0006 **Component:**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

BAY 5

Visual Inspection Testing

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as OBG Component. The weld designations reviewed are as follows:

1. TR1E - PP28 - 009

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #064; 065 located on Bike Path BK001 – 031. Welder is identified as 203176. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS -B - P - 2112.

SMAW process welding of weld joint #002 located on Cross Beam CB202F – 016. Welder is identified as 215478. ZPMC QC is identified as Zheng Zhi Wei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc –U4b – F.

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BAY 6

Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

- 1. $SP3049 001 001 \sim 010$ Green Tag # 10407
- 2. BP3029 001 023; 024; 025; 031; 037; 038; 039; 045; 047; 049; 050 Green Tag # 10406
- 3. $SP3010 001 037 \sim 063$

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #9B located on WD1 – A305 – 65M – 1. Welder is identified as 066457. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2112.

This QA Inspector observed the following work not in compliance:

During random verification Magnetic Particle Testing (MT) for the OBG Side Plate, observed one (1) Transverse linear indication approximately 8mm in length in the weld metal on SP3010-001-064.

For Further details please see the incident report: - 040120F4_TL-15_B227_08-18-09_ (MT) Transverse Indication

BAY 7

Ultrasonic Testing

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

- 1. DP3001 009; 010; 011
- 2. DP3039 009; 010; 011

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #006 located on Edge Plate EP3006 – 001. Welder is identified as 062447. ZPMC QC is identified as Zhou Jie. The welding variables recorded by QC appeared to comply with the WPS – B -T-2132-3.

FCAW process welding of weld joint #015 located on Edge Plate EP3010 – 001. Welder is identified as 203204. ZPMC QC is identified as Zhou Jie. The welding variables recorded by QC appeared to comply with the WPS – B -P-2112.

FCAW process welding of weld joint #011 located on Edge Plate EP3006 – 001. Welder is identified as 205774. ZPMC QC is identified as Zhou Jie. The welding variables recorded by QC appeared to comply with the WPS – B -T-2132-3.

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FCAW process welding of weld joint #010 located on Edge Plate EP3007 – 001. Welder is identified as 215259. ZPMC QC is identified as Zhou Jie. The welding variables recorded by QC appeared to comply with the WPS – B -P-2112.

BAY8

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #021 located on Floor Beam FB204 – 038. Welder is identified as 066687. ZPMC QC is identified as Zhang Jing Xin. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - Tc - U4b - F.

FCAW process welding of weld joint #034 located on Floor Beam FB204 – 039. Welder is identified as 069118. ZPMC QC is identified as Zhang Jing Xin. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - Tc - U4b - F.

FCAW process welding of weld joint #006 located on Floor Beam FB205 – 037. Welder is identified as 066687. ZPMC QC is identified as Zhang Jing Xin. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - Tc - U4b - F.

FCAW process welding of weld joint #037 located on Floor Beam FB204 – 037. Welder is identified as 069118. ZPMC QC is identified as Zhang Jing Xin. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - Tc - U4b - F.

BAY 10

Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as TOWER Components. The weld designations reviewed are as follows:

NORTH TOWER - LIFT1 - CORNER SEAM a/e

nSd1 – a112b/h – 4b (exclusive double diaphragm 1200 mm length)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

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Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Prue,Erik	QA Reviewer